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Procedia Engineering 117 (2015) 900 – 910

**Procedia  
Engineering**[www.elsevier.com/locate/procedia](http://www.elsevier.com/locate/procedia)International Scientific Conference Urban Civil Engineering and Municipal Facilities,  
SPbUCEMF-2015

# Analysis of the Situation in Montenegrin Civil Engineering Sector from the Point of Application of National Regulations and the EU Technical Standards in Construction

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## Abstract

Construction is an important part of every country's economy because it includes a range of economic activities that are pooled and manifested through the construction of an object. Construction sector has specific characteristics that are strictly regulated and which are largely different from other sectors.

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Peer-review under responsibility of the organizing committee of SPbUCEMF-2015

**Keywords:** *construction sector*, national regulation in construction, EU regulation in construction sector, technical regulation, rules and standards in the field of construction

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## 1. Introduction

According to the broadest interpretation of the construction, it includes the production of building materials and semi-finished products, and it is a sector that is very complexly linked to many other economic sectors (tourism, transport, environment etc.). Therefore, increasing the competitiveness of construction can significantly positive

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influence on other industrial sectors as well as on employment and growth in general.

The most obvious specificities of production and business in construction compared to the industry are:

a) Characteristics of production and production process:

- Physical tim unsteadiness and discontinuity of production
- Project orientation
- Customized production
- Individual character of construction production
- Seasonal nature of construction production
- Dependence on the site location
- Separation of projection and production (of construction)
- High initial costs of production
- Complexity of the process and participants
- Establishment of informal governance system and organization
- High level of participation of handicrafted production

b) Product characteristics:

- Building immobility as a result of work
- Bulkiness and indivisibility of construction objects as products
- Use of large quantities of building materials and embedding
- Long life use of the products (which results in conservatism to new technologies)
- Product high price.

## **2. National regulations and laws and the EU directives in the construction sector**

The main segments of the construction industry, such as the urbanization and physical planning and construction of buildings should be regulated by a special set of laws and regulations. Also, the construction industry is regulated by a set of laws to ensure the preservation of public interest, such as public interest in the field of environmental protection, occupational safety, fire protection, energy efficiency, public procurement and others. A similar situation exists at the level of the European Union where several directives are indirectly related to this area.

### *2.1. National regulations and laws in the construction sector*

In the field of civil engineering, urban planning and zoning the Law on Spatial Planning and Construction (Official Gazette of Montenegro 051/08) is the basic, as well as numerous bylaws which further elaborate the issues regulated by this law. In the field of urban planning and construction a large number of by-laws is adopted. In addition to the above, the Law on Construction Products has been adopted (Official Gazette of Montenegro, 018/14), which began to apply from 01 January 2017.

Law on Spatial Planning and Construction has recently undergone changes several times (7 times) and a new draft of the law is in the process.

The main objective of the Law on Spatial Planning and Construction is to prescribe the conditions and procedures that must be met in order to provide conditions for the spatial development of Montenegro and conditions for building in accordance with the law and other regulations, standards, technical and quality norms. The law in this regard has predicted special conditions for the participants in this process (planners, designers, auditor, contractors, supervisory authorities, persons performing technical inspection). Extensive objectives necessitated the extensive law which is divided into nine chapters with a total of 199 members (24 articles are added through amendments to the law).

Documentation is consisting of planning documents whose contents are defined by this law. Basic state planning document is the Spatial Plan of Montenegro and all other planning documents must be harmonized with it (spatial

plan for special purposes, detailed spatial plan, state location study; spatial and urban plan of local governments, detailed urban plan, urban project, a local study site). The government is responsible for adaption of a detailed spatial plan and a state study of location while the Parliament is in charge for adoption of a spatial plan of Montenegro and a spatial plan. Local planning documents adopted by the Assembly of the local self-government (and in cases prescribed by law, it can be brought by the Government of Montenegro). The procedure of making and planning documents from the moment of decision of the development of the planning document, to the adoption of planning document it envisages the participation of the public in the form of publication of decisions and public debate on the planning document draft. The law regulates the conditions to be met by a person who works on planning documentation.

In order to start the execution of the preparatory work the investor must have only the preliminary design and building permit while the execution of major works should be revised. Before starting the investor has to inform the responsible inspection. In the same chapter tasks and investors, designers, competent authorities and supervisory bodies in the process of construction of the structure are defined. Especially the obligations of the contractor and the supervisor (who is appointed by the investor) are elaborated in terms of the required documentation. The law regulates the conditions to be met by persons performing work and carrying out supervision.

One of the main objections to this Law refers to the fact that certain questions concerning the construction of facilities treat a number of other laws and regulations (more than 20), which are partly mutually inconsistent, ambiguous and vague.

In addition, the preparation and adoption of planning documents is running extremely slowly: the harmonization of local planning documents with the law is not completed nor the harmonization of lower level plans with higher plans within the period defined by law. The reasons are mainly in the under-an updated cadastral documentation and surfaces, inefficient public procurement procedures which are required in this area, the inefficiency of the process of making plans but in the absence of professional capacities in planning organizations, too. Significant disadvantages of the system in the past were the result of inadequate and ineffective supervision over the implementation of plans which led to the construction of a large number of illegal buildings. Apart that, the problem is the underdeveloped real estate cadastre (about 51% of the territory of the real estate on which the cadastre made a survey). The medium-term plan until 2013 estimated finalization of about 20% of the territory to establish a digital cadastre.

As noted above a set of laws in various fields influence the construction industry:

- in the field of environmental protection,
- in the field of safety on work,
- in the field of fire protection,
- in the field of energy efficiency,
- in the field of public procurement.

Contractual relations between participants in the arrangement of space and construction facilities are specifically regulated by the Law on Obligations (Official Gazette of Montenegro, 47/08), and chapters Treaty on the work and the Contract agreement, but also specific rules of construction (Official Gazette of FRY, 18/77) whose application is not mandatory, although in the past there was a good experience with their application.

The adoption of the Law on Concessions (Official Gazette of Montenegro 08/09) achieved a normative provision as a precondition of realization of large investment projects of national interest through concessions.

## *2.2. EU directives and other EU regulations in the field of construction*

European directives define the mechanisms and principles that must be applied in each Member State as a platform for legislation and regulations in different areas. This section gives a brief overview of European directives and regulations that directly or indirectly treat and affect the environment, too.

### 3. EU Construction Product Regulation – 305/2011 CPR

In the field of Construction Products Directive 89/106/EEC was in force, which was abolished by the EU Regulation on Construction Products No. 305/2011 (CPR).

The Directive defined essential building requirements (depending on application) and building products that are valid for all member states. This Directive used to apply to products which were intended for installation in building structures that must be suitable for use fulfilling the essential requirements for normal and economically reasonable life of the facility. Building products under such conditions must meet certain technical requirements (i.e. prescribed technical characteristics) that ensure that buildings meet the essential requirements (mechanical resistance and stability; safety in case of fire; hygiene, health and environmental protection; safety and accessibility when using; noise protection, economical use of energy and conservation of heat and the only such products can be released. In the spirit of the Directive, the product is suited for use if it is in accordance with the harmonized standard, a European technical approval that is recognized in the European Union. Such products are marked with the CE symbol with the freedom of movement and use. Declaration of Conformity (DoC) is the key document provided for this Directive, certifying that the product meets the essential requirements of all directives relating to that product. This document is being issued after the completion of the relevant conformity assessment procedures and, as a general rule, monitors products with a CE mark.

EU Construction Product Regulation (CPR) is mandatory in the Member States as of 01.07.2013. The aim is to simplify procedures in the field of conformity assessment and marking CE label of individual products (Official Journal of the EU Regulations on construction, 2011) which is achieved through the following elements:

- A system of harmonized technical specifications,
- Agreed grading system for each group of construction products,
- Notified bodies and
- CE marking products.

This decree regulates the requirements for placing construction products on the EU market. The products can be marketed if they are adequate to their purpose. This implies that the works in which the products will be built, meeting the basic requirements laid down in this Regulation, namely: mechanical resistance and stability, safety in case of fire; hygiene, health and the environment; safety and accessibility when using; protection against noise; economical use of energy and heat preservation; sustainable use of natural resources.

Regulation provides standardized conditions for the commercialization of construction products in the European market, as well as for the implementation and use of CE marking, by providing reliable information on construction products in terms of characteristics. Building product suitable for use has been produced in accordance with the harmonized standard for a product or technical requirement recognized at the EU level as evidenced manufacturer – Statement of properties (Declaration of Performance - DoP) and the CE label.

System of Assessment and Verification of Constancy of Performance define the degree of involvement of third parties in assessing the compatibility of the product with the relevant technical specifications. For each product group, this system is granted by the member state or the European Commission based on the implications of the product on health and safety and on the nature of the manufacturing process of the product itself.

A total of 5 systems that define the level of involvement of Notified Body are determined:

- System 1+ – Certification of product compliance with control measurements;
- System 1 – Certification of product compliance without control measurements;
- System 2+ – Certification of the FPC – Fabric production control with continuous supervision;
- System 3 – Documentation of fabric production control (FPC) is provided by the manufacturer, while the accredited body provides the initial type testing (ITT);
- System 4 – Continuous assessment of factory production control (FPC) provided by the manufacturer to conduct and perform the initial type testing of the product (ITT).

The Regulation (Report from the Commission to the European Parliament, 2014) provides the establishment of

harmonized technical specifications which all participants in the construction sector are obliged to respect. The bodies of the Member States define their requirements for use of construction products in its territory by reference to the methods of evaluation and classification in the harmonized technical specifications. The vendor states the product properties in CSR and the designers define product characteristics to be used by contractors in the construction process.

Law on Spatial Planning and Construction is aligned with this Regulation. In Article 71a, the law defines the essential requirements for the facility while building products and requirements that must be met are defined by the Law on Construction Products (Official Gazette of Montenegro, 018/14), which began to apply from 1st January 2017. The application of some of its provisions is defined by the date of accession of Montenegro to the European Union. In this Law, the Construction Products Regulation is partially transposed.

#### **4. Directive on energy efficiency**

These directives are relatively new and are aimed at improving energy efficiency in different fields. The basic directives in this area that most directly affect the construction are:

- Directive on energy efficiency 2012/27/EC
- Energy Performance of Building Directive EPBD 2010/31/EC.

#### **5. Directive on energy efficiency 2012/27/EC**

This Directive establishes a common framework of measures to achieve an increase in energy efficiency of the Union for 20% by 2020 (Official Journal of the EU on energy efficiency, 2012), with the obligation of establishing national targets to increase efficiency by 2020. Also, the measures and requests at the national level should be more stringent than those specified in the Directive. In addition, the rules to remove barriers in the energy market are defined.

Montenegro has partially transposed the Directive 2012/27/EC on energy efficiency through amendments on the Law on Energy Efficiency (as of 1 July 2014). Through amendments on the Law on Energy by 1 January 2015 (Report on the screening of the chapter: Energetic), it will include all of the current issues to finalize the transposition of the Directive on energy efficiency from 2012.

#### **6. Energy Performance of Building Directive EPBD 2010/31/EC**

This directive replaced the earlier Energy Performance of Building Directive EPBD 2002/91/EC.

The most important requirements of the Directive 2010/31/EC which the EU member states are required to transpose into their legislation are as follows:

- Member States are required to establish a methodology for calculation of the integrated energy performance of buildings with a view to achieve optimal cost levels of efficiency; according to general framework outlined in Annex 1 of the Directive on the national and regional level;
- Member States are required to establish the minimum requirements relating to energy efficiency: the new building; for existing buildings, building units and building elements that undergo significant reconstruction; building elements that form part of the building envelope and that have a significant impact on the energy efficiency of the building envelope; technical systems of the building, regardless of when they are placed, replaced or upgraded. It is mandatory to review these requirements every five years;
- The adoption of national plans for increasing the number of buildings around zero level of energy;
- Certification of energy efficiency of buildings or civil engineering unit which provides information on the required amount of energy for the building and what can be changed in order to improve efficiency. Certificate must be accompanied to prospective buyer or tenant (for newly built, sold or leased buildings apply to maximum 10 years) as an independent assessment of the energy efficiency of the building. It also applies on buildings

where over 500 m<sup>2</sup> of total usable area occupies the space used by public authorities (from 9 September 2015 that the threshold decreases from 500 m<sup>2</sup> to 250 m<sup>2</sup>);

- Regular inspection of heating and air conditioning systems so that their effects can be monitored and optimized. Based on the inspection which includes an assessment of system efficiency and capacity in relation to the needs of the building, should advisory affect users if you need to replace the boiler, do some modifications to the system or to incorporate alternative solutions for heating and air conditioning;
- Establishment of independent systems of energy certificates control and the review report.

This directive is partially transposed in Montenegro as well. The remaining elements of Directive 2010/31/EC should be included in an amendment to the Law on Energy Efficiency until 1 July 2014, which will be followed by an update of relevant regulations in accordance with the amended provisions on the Law on Energy Efficiency until 1 July 2015.

Directives in the field of environmental protection have a direct or indirect impact on the construction industry, because their demands have encouraged in some way construction of facilities for special purposes and objectives with specific standards and technical equipment for environmental protection.

EU regulations that implement environmental policy of the Union are, in the narrower sense, an instrument of implementation of environmental policy established at EU level. In a broader sense, common rules of the EU are means of removing the differences between national regulations, and harmonization of the legal regime of free movement of goods, capital and services in the internal market in terms of environmental protection. At the same time, they specify the requirements under which goods may be imported on the common market, i.e. the conditions under which it can exercise "Greenfield" and "Brownfield" investments in the EU.

In accordance with the principle of prevention, sustainable development and the principle of public participation in decisions that may significantly affect the environment, EU directives define the procedures of decision making in the area of strategic planning and design. These regulations are intended to enable the competent authorities to make their development decisions in accordance with a special procedure, with prior analysis of all impact aspects of plans, programs and projects on the environment. The most favourable consideration of alternatives is taking into account all of the best available information. At the same time these regulations are guarantee to the public's right to participate in decision-making. The legality of such decisions is reviewed in court (SEA Directive and the EIA Directive).

In that regard, particularly important are:

- Directive on the assessment of the effects of certain plans and programmes on the environment 2001/42/EC- Strategic Environmental Assessment - SEA,
- Directive on the assessment of the effects of certain public and private projects on the environment –The EIA Directive (85/337/EEC)

In addition to the above, in this corpus are regulations to establish environmental quality standards (definition of the environment in general or partly criteria). Regulations are establishing with the requirements related to the production processes in terms of performance in relation to environmental quality standards and sustainability. In this group, among other things the Directive on solid waste, water and noise are included etc.

Directive on the assessment of the effects of certain plans and programmes on the environment (2001/42/EC) is in force since 2001 and they are related on the broad set of public plans and programs (spatial plans, plans for transport, waste, etc.) without pre-defined list of plans that must be used. They must apply to those plans and programs that provide a framework for the development of future projects subject to production of the evaluation of the environmental impact in accordance with special regulations. The most widely speaking, a Member State is the one based on the procedures prescribed in the assessment process in order to prepare the strategic impact assessment. As part of strategic environmental assessment alternative solutions are proposed. The investor chooses solutions considered under the next phase, i.e. within the framework of evaluation on the environment.

Directive on the assessment of the effects of certain public and private projects on the environment (85/337/EEC) is in force since 1985 and since then has undergone several amendments, the last in 2009, after which it was codified by Directive 2011/92 EU and by Directive 2014/52 EU. This directive identifies projects that can have a significant

impact on the environment and for which the impact assessment is required. At each stage of the procedure the involvement and outreach are estimated. It implies that the competent authority for environmental protection, at the request of investors, determine what information is to provide the investor (the one for which purpose is implementing the project). After a study of impact assessment in accordance with the prescribed content, the competent authority shall take a decision. If it is established that the project has significant adverse effects on the environment, investors are obliged to do everything necessary to avoid, prevent or minimize such effects. These projects must be followed by the methods specified by the Member States.

Both directives have been incorporated into the laws regarding environmental protection: the Law on strategic environmental assessment and the Law on the impact of assessment on the environment.

## **7. Directive on services in the internal market 2006/123/EC**

The Directive applies to services in the internal market. The aim of this Directive is to facilitate cross-border flows and the receipt of services and creation of conditions for the removal of legal and administrative barriers in order to form a single market for services within the limits of the European Union. Transporting this directive in the Montenegrin laws and regulations relevant to spatial planning and construction of facilities, conditions for the integration of Montenegrin market services are being created in the field of spatial planning and construction of buildings in a single market for services within the limits of the European Union. The first prerequisite for its application has been made with the establishment of the Chamber of Engineers of Montenegro, as well as the introduction of a licensing system.

Directed towards the same goal and the Directive on recognition of professional qualifications (2005/36/EC) in which, among other things, the necessary conditions which are necessary to meet by architects and enable them to recognize professional qualifications in the field of the single European market are defined.

## **8. Compliance of technical regulations, rules and standards with the EU standards in the area of construction sector in Montenegro**

From the moment of signing the Stabilization and Association Agreement, Montenegro intensively works on building the economic system that will be compatible with EU regulations and standards in order to ensure free movement of goods and people and unlimited competition. The main prerequisite is the adoption of European law, or *Acquis Communitaire*. In the field of administrative regulations Montenegro has made some progress in its legislation transposed a considerable number of directives and other forms of EU legislation, as explained in the previous section. Simultaneously with this, Montenegro is working on adopting the European technical regulations and standards.

Technical regulations, that are mandatory and standards whose application is optional (unless they are involved in technical regulation), allow easier and simpler world trade. Standard is a document, established by a consensus and approved by a recognized body, which determines, for common and repeated use, rules, guidelines or characteristics for activities or their results in order to achieve an optimal level of order in a given context. The standards should be based on the proven science, technology (techniques) and experience, in order to achieve optimal benefits for society.

Product certification involves testing of product conformity with the requirements of technical regulations or the requirements of the standard. The European Union has a unique approach to certification through the harmonization of the laws of the Member States for the free movement of products. Within the EU directive "New Approach" is defined so called essential requirements that products must meet in order to be able to put on the EU market. Essential requirements are the most easily fulfilled by the application of harmonized standards.

## **9. Eurocodes for construction (Structural Eurocodes)**

Technical regulations define certain characteristics of the product or production process including the required administrative procedures. Their adoption is under the exclusive jurisdiction of the state.



In the construction of Montenegro around 50 technical regulations is in force in the area of operations on structures including seismic actions and resistance of structures, concrete, wood, steel, masonry, construction, geotechnical, foundation and regulations regarding the design, construction and maintenance of various types of facilities. Some of these regulations were enacted in the 60s of the last century. They generally call for JUS standards regarding the characteristics of the materials, processes and procedures.

The most important technical regulations in the construction sector, whose adoption began in Montenegro, are Eurocodes for construction. Eurocodes are standardized general principles and rules for construction and other buildings, with application in all EU countries, in order to allow equal participation of designers on all projects in the EU. So, these are mandatory standards. Overall Eurocodes objectives are defined with aim to comply technical regulations in the field of structural engineering with defined basic requirements for facilities. One of the goals is also to establish a unique basis for the technical documentation in order to specify the contract for construction of facilities. At the same time, they are a means for the removal of obstacles arising from the existence of different national regulations.

The European Community in 1973 initiated a program development of harmonized technical regulations in the field of construction. They were joined by the EFTA countries – the European Free Trade Association so that in the 1980s the first generation of these standards labelled ENV was published. At the end of 1989, further work on the development and implementation of Eurocodes for construction was taken over by the European Committee for Standardization (CEN). After several years of comparative analysis and consideration of the results of experimental applications, European pre-standards innovate and adopt a European standard with a compulsory use. Within this large group of technical regulations, the total volume of several thousand pages, arranged in 58 parts, the job of accepting the definitive version was completed in 2007 in the form of European norms - EN with the following labels:

- EN 1990 Eurocode 0: Basis of structural design
- EN 1991 Eurocode 1: Actions on structures
- EN 1992 Eurocode 2: Design of concrete structures
- EN 1993 Eurocode 3: Design of steel structures
- EN 1994 Eurocode 4: Design of composite steel and concrete structures
- EN 1995 Eurocode 5: Design of timber structures
- EN 1996 Eurocode 6: Design of masonry structures
- EN 1997 Eurocode 7: Geotechnical design
- EN 1998 Eurocode 8: Design of structures for earthquake resistance
- EN 1999 Eurocode 9: Design on aluminium structures

By March 2010 the Eurocodes were in parallel use with existing (old) national legislation of the member countries, and since then the national legislation is repealed.

In addition to these standards, nearly 500 supporting European standards were provided of which a number directly relates to the application of the Eurocodes, and the rest are essential for engineers of all disciplines who are engaged in the design, construction and maintenance of buildings. It is the obligation of Member States to translate the standards into their own language and adopt it as a national standard in one of the languages of CEN (English, French, German).

In these norms it is given the option that certain parameters, which are in the Eurocode recommended values which are generally considered acceptable, each country has a right to adopt towards their particular circumstances, and to publish these its special national annex. Eurocodes define unified design rules which differ only in part of the National Annex, which are determined by specific national parameters. They take into account differences in geographical, geological and climatic conditions (wind map, snow and seismic maps) and allow countries implementing Eurocodes to decide on the level of security. National parameters (values of the partial factor, different coefficients, simplified combination of load, nominal values of action and other data) of individual countries should be included in the national annexes for each Eurocode.

Eurocodes act as:



- A mean of harmonizing buildings and civil engineering structures with the essential requirements (the Directive CPD, 89/106/EEC) especially in terms of mechanical resistance and stability, fire resistance, durability, cost effectiveness,
- A tool in the contract definition,
- A framework for the development of harmonized technical specifications for construction products.

Political reasons for the acceptance and adoption of the Eurocodes in Montenegro are meeting the requirements for membership in the EU in terms of creating a free-market of products, services and capital. From an economic point of view, it is expected to allow profits to producers and designers who equally participate in that market. To make this possible it is necessary to adopt Eurocodes for construction and to create the institutional, legal, organizational and technical conditions for their implementation.

In that sense the main task was assumed by the Institute for Standardization of Montenegro (ISME). It is a Montenegrin national standardization body responsible for the standardization system development through cooperation between the state, businesses and other stakeholders. The Institute for Standardization (ISME) has become a member of several international bodies responsible for standardization: Correspondent member of the: Correspondent member of the International Organization for Standardization (ISO), Affiliate member of the European Committee for Standardization (CEN), Associate member in the International Electrotechnical Commission (IEC) and the Affiliate member of the European Committee for Electrotechnical Standardization (CENELEC). In the process of accession of a candidate country to the European Union it is essential that national standardization bodies fulfil appropriate conditions with certain legal, organizational and technical requirements.

In the aim of adoption of the Eurocodes for construction, ISME has in 2011 founded the Technical Committee ISM/TK 002: Eurocodes, whose members are representatives of the state administration, scientific and educational institutions – universities, business associations, small and medium enterprises, with the task of monitoring the work of CEN/TK 250. Thereafter ad hoc group leaders for all Eurocodes are nominated. In addition apart Institute in the adoption of Eurocodes process several bodies are included: Ministry in charge of construction, Faculty of Civil Engineering in Podgorica, Montenegro Chamber of Engineers, Department of hydrometeorology and Seismology, Institute of Geological Research, Chamber of Commerce of Montenegro, Faculty of Architecture in Podgorica, Engineers Association of Montenegro, Montenegrin association for Earthquake engineering and others. In this process it is necessary to carry out the following activities:

- Eurocodes translation through the work of the technical committee ISME/TK 002: Eurocodes;
- Names definition and harmonization on the TK level (preparation of the terminological dictionaries);
- Definition of maps of snow, wind, temperature and earthquake;
- Development of national annexes, conducting public hearings and adoption of the Eurocodes.

Implementation of the IPA 2010 project "Achieving the highest level of safety and technical quality of construction" has been recently completed which was implemented by the Ministry of Sustainable Development and Tourism in cooperation with the Austrian Institute for Standards and the French AFNOR as junior partner. The main results are:

- Action plan for adoption of the Eurocodes
- Action plan for implementation of the Eurocodes
- National annexes for the Eurocode 8, part 1.

Eurocodes adopt the Institute for Standardization of Montenegro, within which was founded ISME/TK 002 for the Eurocodes, and within it, due to the magnitude and specificity of the work ad-hoc groups for specific Eurocodes. The ad hoc groups consist of four experts and three additional experts who are carrying out the verification of translations and national annexes. Technical Committee proposes publishment of certain (all) parts of the Eurocodes (the English and Montenegrin version) and the National Annexes. The tasks of an ad hoc group are to prepare draft and discuss about national annexes for each part of the Eurocode in Montenegrin language. The whole process –

from the start of the translation until the publication of parts of the Eurocode and the National Annex in Montenegrin lasts an average of one year. For now, the ad hoc group has prepared a MESTEN1990 with national annex draft for the Eurocode 0 which is given to a public hearing. After previously mentioned and the verification of ISME/TK 002: Eurocodes will be adopted as a Montenegrin standard.

Assuming that the average period of adoption of Eurocode is about a year the whole process can be completed in approximately 4.5 years, i.e. until 2019. It is estimated that the adoption of the Eurocodes by 2018 will cost 1,042,796 EUR.

In parallel with the adoption of the Eurocodes it is necessary to create conditions for their implementation which would start in late 2014 and would be realized through:

- Harmonization of broad legislative framework with mandatory application of the Eurocodes,
- Innovation of curriculum in engineering schools, as well as on Civil and Architecture Faculty,
- Information campaigns and trainings that would be conducted in the framework of the Chamber of Engineers, the Chamber of Commerce and the Ministry of Sustainable Development and Tourism.

Standardization has become a prerequisite for successful business in all spheres, including the construction industry. To this end, and in order to provide increased security and cost-effectiveness of building construction the process of introduction of Eurocodes has started. It entails the adoption of a number of rulebooks for mandatory use in construction. Their application opens numerous development opportunities for Montenegrin construction industry (Krstajić, 2006) because it sets all builders from the EU to the same starting position: experts from the countries which have implemented national legislation are now moving from the same level of experience and knowledge of regulations and standards, so they have the opportunity to master new rules, apply them and improve, and finally, take a favourable position in the market and provide the expansion.

In addition to the adoption and implementation of Eurocodes for construction (Krstajić, 2006), it would be desirable to do detailed technical specifications for different types of construction works and facilities: roads (motorways, highways and regional roads), bridges, tunnels, river engineering, geotechnical engineering, objects made of different materials (concrete, steel, wood), rehabilitation, testing materials, etc according to the Development strategy of Civil Engineering in Montenegro to 2020. These specifications may be temporary (until the completion of the process of final establishment of a national technical regulations and standards compatible with European) or permanent character that can be included in the tender documentation for the transfer of design and/or construction of various objects.

## 10. Conclusion

Strategic orientation of Montenegro towards joining the EU has a crucial importance for the future of its development. Strategic development priorities are sustainable development, the rule of law and improvement of the living standard of the population. Montenegro sees the EU as the best framework for further development of the overall reform of adjustment to the European standards and their adoption. A serious process of adjusting to the European acquis in Montenegro is intensifying activities to monitor the harmonization of national legislation with the EU acquis and implementation of regulations and technical standards of the EU in the field of constructing industry.

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